

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Cancelled)

15. (Currently Amended) A radio transmitter comprising:  
a channel codec configured to form a normal channel;  
a burst former configured to form normal radio bursts;  
a multiplexer configured to assign to each radio burst ~~the~~ a moment for its transmission; and  
a clock configured to obtain synchronized timing, which synchronized timing defines the coordination between the transmission of radio bursts from at least two different base stations each including at least one radio transmitter,

wherein the burst former is arranged to form synchronized radio bursts, a length of each of the synchronized radio bursts is at most half of a length of a normal radio burst, and the multiplexer is arranged to insert a synchronized radio burst in place of the normal radio burst such that transmission of the synchronized radio burst is synchronized with the obtained synchronized timing.

16. (Previously Presented) The radio transmitter according to claim 15, wherein the burst former is arranged to form at least two successive synchronous radio bursts and the multiplexer is arranged to insert at least one of the at least two successive synchronous radio bursts in place of a the normal radio burst.

17. (Previously Presented) The radio transmitter according to claim 15, wherein the burst former is arranged to form a burst having a length equal to a length of a the normal radio burst, said burst comprising at least one synchronized radio burst.

18. (Previously Presented) The radio transmitter according to claim 17, wherein the burst former is configured to place predetermined padding bits in a part of the burst that does not belong to the synchronized radio burst.

19. (Previously Presented) The radio transmitter according to claim 15, wherein the burst former is configured to place a predetermined bit pattern in the synchronized radio burst.

20. (Previously Presented) The radio transmitter according to claim 19, wherein the predetermined bit pattern is a training sequence.

21. (Previously Presented) The radio transmitter according to claim 15, wherein the channel codec is arranged to place in the synchronized radio burst information including at least one of the location coordinates of the radio transmitter and an offset.

22. (Previously Presented) The radio transmitter according to claim 15, wherein the multiplexer is arranged to place the synchronized radio burst in a time slot.

23. (Previously Presented) The radio transmitter according to claim 15, wherein the channel codec is configured to use at least one normal physical channel for the synchronized channel.

24. (Previously Presented) The radio transmitter according to claim 23, wherein the radio transmitter is configured to indicate on a control channel physical channels to be used for the transmission of the synchronized channel.

25. (Previously Presented) A The radio transmitter according to claim 15, wherein the radio transmitter is arranged to receive signaling data from channels in a direction of reception corresponding to synchronized channels in a direction of transmission.

26. (Previously Presented) The radio transmitter according to claim 15, wherein the clock is a GPS receiver.

27. (Previously Presented) The radio transmitter according to claim 15, wherein the radio transmitter is arranged to transmit a synchronized radio burst when the transmitter is in discontinuous transmission.

28. (Previously Presented) The radio transmitter according to claim 15, wherein the radio transmitter is arranged to use only a part of a capacity of a normal channel for transmission of synchronized radio bursts.

29. (Cancelled)

30. (Currently Amended) The radio transmitter according to claim ~~15~~21, wherein the offset is the time difference between transmission moments of an ideal synchronized radio burst and an actual synchronous radio burst.

31. (Previously Presented) The radio transmitter according to claim 15, wherein the channel codec is arranged to further form a synchronized channel.